

***Comparative Study of  
Motor Carrier Services Programs***

***Narrative Description of Study Results***

**Submitted to:**

**THE MONTANA DEPARTMENT OF TRANSPORTATION  
MOTOR CARRIER SERVICES DIVISION**

**by:**

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# ***Comparative Study of Motor Carrier Services Programs***

## **II. NARRATIVE DESCRIPTION OF STUDY RESULTS**

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# ***Comparative Study of Motor Carrier Services Programs***

## **II. NARRATIVE DESCRIPTION OF STUDY RESULTS**

### **1.0 Introduction: Background and Objectives**

All fifty states and territories of the United States and the Canadian provinces operate commercial motor carrier programs which include weight and length and safety inspection requirements. Within each of these jurisdictions, there exists a mixture of "regulatory" and "enforcement" style activity. For the purposes of this report, "regulatory" activities are considered to be those that have to do with establishing and administering rules and regulations, issuing permits and licenses, and collecting associated fees and fines. "Enforcement" activities relate to ensuring compliance with laws and regulations and exercising the authority needed to force compliance or otherwise cause violators to cease non-compliant activity.

The Motor Carrier Services Division (MCS) of the Montana Department of Transportation (MDT) commissioned this study to provide factual, comparative information about the motor carrier programs of selected jurisdictions, focusing on the manner in which those jurisdictions deal with the mixture of regulatory and enforcement responsibilities with which they are faced. The following nine jurisdictions were subjects of the study:

- Alberta, Canada
- Arizona
- Colorado
- Idaho
- Nebraska
- North Dakota
- Texas
- Washington
- Wyoming

The report does not offer management recommendations or conclusions but provides insight into the comparative organizational structures of the study jurisdictions, the philosophy by which they approach the regulatory versus enforcement nature of their operations, the situation of program personnel in regard to program philosophy and their job satisfaction, and measures of program achievement.

### **2.0 Report Organization**

The report is organized in three major sections: 1) Executive Summary; 2) Narrative Description of Study Results; and 3) Study Jurisdiction Interview Summaries. Interview Summaries provide a more detailed explanation of the results of interviews with personnel in each jurisdiction. The Appendix includes salary surveys compiled from research sources which provide more detail on comparative salaries for various types of employees in each of the jurisdictions. Also included in the appendix is a copy of the survey form and document request list used as the basis of information collection during the interview process.

### **3.0 Study Process**

Information included in this report was obtained by Mountain West Management through written surveys, on-site visits with motor carrier program personnel in each of the study jurisdictions, and research on motor carrier program topics through a variety of sources. Personnel constituting the consulting team were Steve Huntington, General Partner of Mountain West, and Jim Kembel, Special Consultant to the firm for the motor carrier services study.

### **3.1 Interviews**

The interview portion of the process constituted the most significant of the study activities. Each of the study jurisdictions was contacted by telephone in advance of scheduling an on-site visit. Also, a package of information was sent to each jurisdiction including a cover letter describing the purpose of the study, a copy of the basic set of questions that would be asked by the consulting team, and a list of documents and other informational items requested as supporting material. Jurisdictions were asked to set aside the greatest part of a day for the interview process and were requested to make available motor carrier program staff from all levels of the organization.

All of the jurisdictions were cooperative in the study process. Some prepared written answers to the basic survey questions in addition to participating in the interview and all supplied all or a portion of the documents requested. While some organizations were more open than others to wide-ranging interviews and discussions with program staff, all made available members of their management and field staffs for interviews, either at the program's central office or at remote offices or weigh stations.

For all study jurisdictions, the consulting team interviewed the motor carrier services program administrator or senior manager, other members of management, a supervisor in direct charge of field personnel, and field personnel engaged in weight and length program activities and if applicable to the jurisdiction, vehicle safety inspection activity. Also, if applicable to the jurisdiction, interviews were conducted with field personnel engaged in mobile weight and length and safety inspection activities. Detailed lists of individuals interviewed are included in the Study Jurisdictions Interview Summaries.

Three of the nine study jurisdictions (Arizona, Colorado, and Idaho) have allocated responsibility for certain aspects of motor carrier programs to separate agencies. In Arizona and Idaho, the organizational split separates safety programs, administered respectively by Highway Patrol and State Police, from weight and length programs, administered by Departments of Transportation. In Colorado, the Department of Revenue houses both safety and weight and length programs; the Colorado Highway Patrol also administers safety programs. While the study focused on single organizations responsible at a minimum for weight and length programs, the consulting team also conducted interviews with at least one person from the non-weight and length program in Arizona and Idaho.

### 3.2 Other Research

Additional research was conducted to augment information assembled through the interview process. The focus of additional research was identification and display of data to provide an independent measure of the achievements of each jurisdiction weight and length and safety programs, program compliance with Federal Highway Administration requirements, and finding material to fill gaps in information supplied by study jurisdictions. Sources for additional research include the Federal Highway Administration - Office of Motor Carrier Field Operations, the Maintenance Council of American Trucking Associations, and comparative salary information from the International City/County Management Association, the U.S. Department of Justice, and the Montana Department of Administration.

### 3.3 Internal Reviews

An important component of the study process was internal review conducted by a Technical Panel consisting of MCS field officers, a representative from the Montana office of the Federal Highway Administration, and MCS management. Activities included receipt of interview results and data collected through site visits, review of draft study findings and information displays, and participation in an oral presentation on preliminary study results. The objective of the internal review process was not to affect the substance of information collected, but to make sure that all subjects of concern to interested parties were addressed and to be sure that the range of perspectives regarding motor carrier programs were acknowledged by the consulting team.

## 4.0 Study Findings

Study findings are grouped according to four general sets of information: *Organizational Structures* including analysis of program titles, responsibilities, employee types; and reporting relationships; *Program Achievement* measures including analysis of weight and length checks and violations and of safety inspections and resulting out-of-service orders; *Program Philosophy: Enforcement versus Regulatory* including analysis of command structures, weapons policies, officer authority, achievement levels, and attitude; *Personnel Practices* including analysis of employee turnover, salary comparisons, hiring and training requirements, separate entity relations, and employees' perception of their professional status; and *Other Findings* including a discussion of FHWA compliance, significant organizational changes, and general impressions formed by the study team. Findings are accompanied by graphic presentations of information relative to each topic of analysis.

### 4.1 Organizational Structures

The focus of this portion of the analysis is the location of motor carrier programs within the overall organizational structure of state or provincial government. The table below displays the basic organizational situations of motor carrier programs in each of the study jurisdictions, the responsibilities assigned to each, and the type of employees used to meet those responsibilities.

**Table 1. Organizational Structures**

| <b>Jurisdtn.</b> | <ul style="list-style-type: none"> <li>• Program Title</li> <li>• Responsibilities</li> <li>• Employee Type</li> </ul>   | <b>Supervisory Agency</b>               | <b>Next Level</b>                |
|------------------|--|---|----------------------------------|
| <b>Alberta</b>   | <ul style="list-style-type: none"> <li>• Carrier Services Prgm</li> <li>• W&amp;L and Safety</li> <li>• Non-Trooper</li> </ul>                                 | Motor Transport Svcs                    | Ministry of Trans. and Utilities |
| <b>Arizona</b>   | <ul style="list-style-type: none"> <li>• Ports of Entry</li> <li>• Fixed W&amp;L</li> <li>• Non-Trooper</li> </ul>   | Motor Vehicle Division                  | Dept. of Trans.                  |
|                  | <ul style="list-style-type: none"> <li>• Highway Patrol</li> <li>• Mobile W&amp;L &amp; Safety</li> <li>• Non-Trooper &amp; Trooper</li> </ul>                 | Dept. of Public Safety                  | Governor                         |
| <b>Colorado</b>  | <ul style="list-style-type: none"> <li>• Ports-of-Entry Division</li> <li>• W&amp;L and Safety</li> <li>• Non-Trooper</li> </ul>                               | Department of Revenue                   | Governor                         |
|                  | <ul style="list-style-type: none"> <li>• State Patrol</li> <li>• Safety</li> <li>• Trooper</li> </ul>  | Dept. of Public Safety                  | Governor                         |
| <b>Idaho</b>     | <ul style="list-style-type: none"> <li>• Ports-of-Entry</li> <li>• W&amp;L</li> <li>• Non-Trooper</li> </ul>   | District Engineers                      | Dept. of Trans.                  |
|                  | <ul style="list-style-type: none"> <li>• State Police</li> <li>• Safety</li> <li>• Trooper</li> </ul>  | Dept. of Law Enforcemt                  | Governor                         |
| <b>Nebraska</b>  | <ul style="list-style-type: none"> <li>• Carrier Enforcemnt Div</li> <li>• W&amp;L and Safety</li> <li>• Non-Trooper</li> </ul>                                | State Patrol                            | Governor                         |
| <b>N Dakota</b>  | <ul style="list-style-type: none"> <li>• Motor Carrier Safety</li> <li>• W&amp;L and Safety</li> <li>• Non-Trooper &amp; Trooper</li> </ul>                    | Highway Patrol                          | Governor                         |
| <b>Texas</b>     | <ul style="list-style-type: none"> <li>• Motor Carrier Bureau</li> <li>• W&amp;L and Safety</li> <li>• Trooper</li> </ul>                                      | Traffic Law Enfmnt Div (Highway Patrol) | Dept. of Pub. Safety             |
| <b>Wshngtn</b>   | <ul style="list-style-type: none"> <li>• Commercial Vehicle Div.</li> <li>• W&amp;L and Safety</li> <li>• Non-Trooper</li> </ul>                               | State Patrol                            | Governor                         |
| <b>Wyoming</b>   | <ul style="list-style-type: none"> <li>• Motor Carrier Svc. &amp; Ports-of-Entry</li> <li>• W&amp;L and Safety</li> <li>• Non-Trooper &amp; Trooper</li> </ul> | Highway Patrol                          | Dept. of Trans.                  |

### Organization Title and Reporting Structure

The table indicates that of the nine jurisdictions included in the study, three (Arizona, Colorado, and Idaho) have separated motor carrier program functions between two agencies, either the Departments of Transportation or Revenue, and the jurisdiction's equivalent of the Highway or State Patrol. All three of those Patrol organizations report to a Department of Public Safety or Law Enforcement.

Five jurisdictions (Nebraska, North Dakota, Texas, Washington, and Wyoming) have placed all motor carrier program functions under the Highway or State Patrol organizations, one of which (Wyoming) reports to a Department of Transportation, one of which (Texas) reports to a Department of Public Safety, and the other three of which (Nebraska, North Dakota, and Washington) report directly to their Governors.

Only Alberta has a non-Patrol agency in charge of all elements of the province's motor carrier programs.

### Program Responsibilities and Employees Types

The Table also depicts the separation of responsibilities between Weight and Length (W&L) program administration and Safety program administration, and indicates the employee types (Patrol Troopers versus Non-Troopers) that are responsible for the particular responsibility. Comparisons focus on Highway or State Patrol Troopers because they are fully sworn law enforcement officers assigned to carry out the Patrol's motor carrier responsibilities in all jurisdictions that utilize them, while non-Trooper motor carrier employees occupy statuses ranging from civilian to special law enforcement officers with limited authority.

Three jurisdictions (Alberta, Nebraska, and Washington) utilize non-State Patrol or Highway Patrol Troopers exclusively to carry out motor carrier program responsibilities. Five (Arizona, Colorado, Idaho, North Dakota, and Wyoming) utilize a combination of Troopers and Non-Troopers. Only Texas utilizes Highway Patrol Troopers exclusively for all of its motor carrier programs.

In regard to the division of responsibilities, in cases in which Highway Patrol Troopers are involved in motor carrier programs, they always are at least responsible for motor carrier safety inspection programs and are in no case involved in fixed station weigh and length programs. Non-trooper personnel are utilized in a variety of capacities with duties ranging from fixed station weight and length program administration, to mobile weight and length programs, to safety inspection programs.

The organizational information described above has direct relevance to following sections on personnel practices, program achievement measures, and conclusions regarding the regulatory versus enforcement philosophies of the jurisdictions. Data will be displayed and repeated where appropriate.

## **4.2 Program Achievement Measures**

The study includes an examination and comparison of program achievement levels among jurisdictions. Utilized are field activity measures including the number of

weight and length checks performed by each jurisdiction, the resulting number of violations of all types, the number of safety inspections of all types, and the number of out-of-service orders affecting drivers and vehicles as a result of safety inspections.

Numbers of weight and length checks and safety inspections are also calculated as a ratio against the jurisdiction's share of the 1995 Motor Carrier Assistance Program (MCSAP) allocation from the Federal Highway Administration (FHWA). While MCSAP allocations from FHWA provide funding for safety but not weight and length programs, measuring numbers of checks as a ratio of MCSAP allocations provides an analysis of each state's activity in both program types versus the best available measure of heavy commercial vehicle activity. MCSAP allocations are calculated utilizing formula which take into account public road and street mileage, the number of truck and tractor registrations, geographical size and population, estimates of annual vehicle miles, and commercial use of special fuels for each state. This methodology provides better information than a display of raw numbers of weight and length checks which may only reflect a state's size, location, and related amount of truck traffic. Allocations of MCSAP funds obviously do not relate to Canadian Provinces so no measure is included for Alberta.

Graphs 1. through 4. following page II-7 apply to program achievement and field activity measures. Below are explanations of data contained in the graphs.

#### Weight and Length Checks and Violations

Graph 1. displays, by *blue bars*, the total of annual weight and length checks reported by each jurisdiction for the most recent year information is available. Data was supplied by study jurisdictions.

States are ordered from left to right according to the descending level of weight and length checks. The graph indicates that Arizona conducted the greatest number of checks at over 6.5 million. Colorado was next at over 4.1 million, then came Washington at almost 2.7 million, Nebraska at over 1.8 million, Wyoming at 1.6 million, Idaho at 1.4 million, North Dakota at 746,000, Alberta at 459,000, and Texas with the fewest at 231,000.

It is useful to note that Arizona and Colorado, which conduct weight and length checks under Departments of Transportation and Revenue, lead the list in terms of weight and length checks. All jurisdictions except Texas perform weight and length checks using personnel other than non-Highway or State Patrol Troopers.

The graph also displays, in the *light blue background area*, weight and length checks as a ratio against MCSAP allocations. Arizona is also the leader in this category with a ratio of 8.77:1, Wyoming was second with a ratio of 5.45:1, and Colorado was third at 5.44:1. Texas was also last in this category with a ratio of .09:1. Again, two of the top three states according to this measure administer weight and length programs through Departments of Transportation and Revenue.

Graph 2. displays, by the *light blue background area*, the reported annual number of violations of all types (including orders to shift loads, warnings, citations, etc.) and, by *dark blue bars*, the percent of annual violations versus annual checks. States are ordered from left to right according to the descending level of total weight and length violations. Washington showed the greatest number of violations at almost 71,000; the



least number was reported for North Dakota at 94. The greatest percent of violations versus checks was reported for Texas (off the graph) at over 17.5%. The smallest percentage was reported for North Dakota at .01%. Some discrepancies are likely inherent in this data because all jurisdictions may not have reported based on a uniformly exhaustive list of violation types.

### Safety Inspections and Out-of-Service Orders

Commercial vehicle safety inspection programs are financed through a combination of funds provided by the jurisdictions and, in the case of the states, FHWA MCSAP funds. The measures of program field activity utilized in the study are the number of safety inspections of all types, including hazardous materials, all levels of vehicle and driver inspections plus bus inspections for federal fiscal year 1992. Inspections are measured as a percent of each state's MCSAP allocation in the same manner that this methodology was employed for weight and length checks. Also utilized are total numbers of out-of-service vehicle and driver orders issued by each state as a result of inspections. The source of data utilized in this section of the analysis is the Fiscal Year 1992 Annual Report of Office of Motor Carrier Field Operations of the Federal Highway Administration. No information is available for Alberta.

Graph 3. displays in the *light blue background area*, the total number of safety inspections conducted by the jurisdiction in fiscal year 1992. The graph shows that Texas reported the most safety inspections at 77,644, Washington had 62,046, Colorado and Arizona were a distant third and fourth at 46,619 and 46,083. Wyoming conducted the least safety inspections at 7,024. Texas and Washington conduct their safety programs under their respective Highway Patrols, Texas with Troopers and Washington with non-Trooper Patrol personnel.

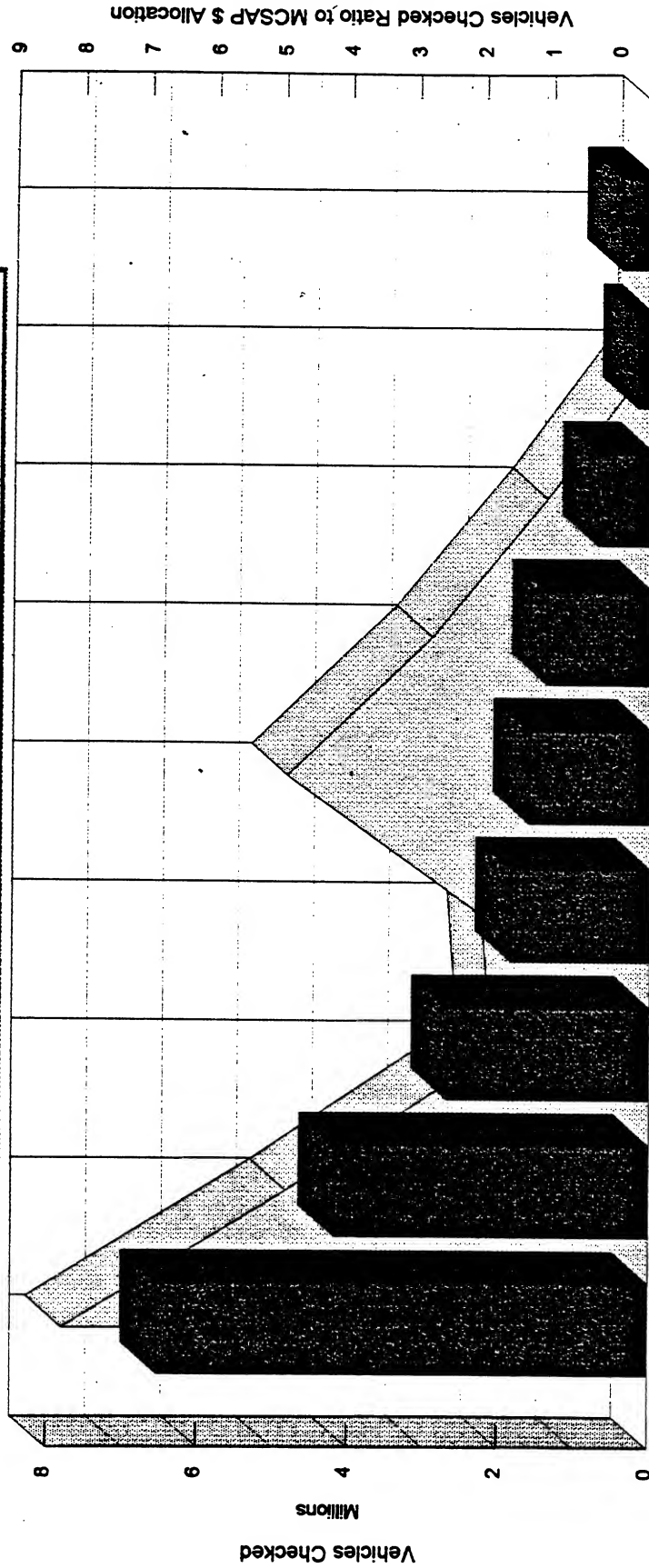
Inspections as a percent of MCSAP allocations are displayed in *dark blue bars*. States are ordered from left to right according to the descending level of inspections as a percent of MCSAP allocations. This analysis, which may be a measure of program efficiency, significantly reorders the relative ranking of the states versus the display of raw numbers of inspections. Arizona and Colorado lead the eight jurisdictions with 6.19 percent and 6.08 percent respectively. Washington is third at 5.44 percent, Texas is a distant fifth at 2.96 percent. Arizona conducts its motor carrier safety program through Trooper and non-Trooper personnel under the state's Highway Patrol; Colorado administers the program under both the state's Highway Patrol and the Department of Revenue's Ports-of-Entry Division.

Graph 4. again shows total number of inspections in *dark blue bars*, the number of out-of-service orders for vehicles and drivers in *red bars*, and the percent of inspections resulting in out-of-service orders in the *light blue background area*. States are ordered from left to right according to the descending level of out-of-service orders as a percent of inspections. Idaho was the leading state in regard to out-of-service orders as a percent of inspections with 43.02 percent, Nebraska and Texas were second and third at almost 38 percent each. The next three states, Wyoming, Washington, and Arizona, ranged in the low 30's. Colorado was last in this measure with 20.45 percent. It is useful to note that two of the three leaders in this category, Idaho and Texas, conduct safety programs exclusively with Highway Patrol Troopers and that Colorado, the last state in this ranking, utilizes a combination of personnel in its Department of Revenue and Highway Patrol Troopers to administer the safety program.

**Graph 1.**

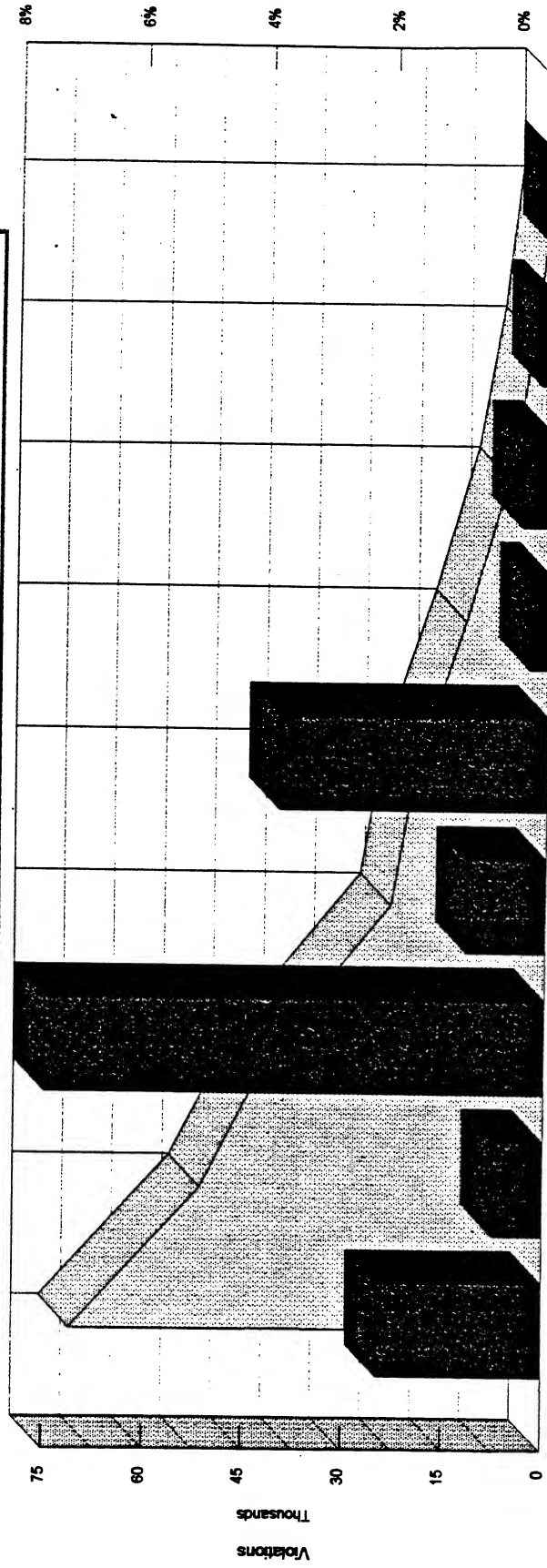
# **Comparative Study of Motor Carrier Services Programs**

Field Activity Measures - Weight & Length Checks



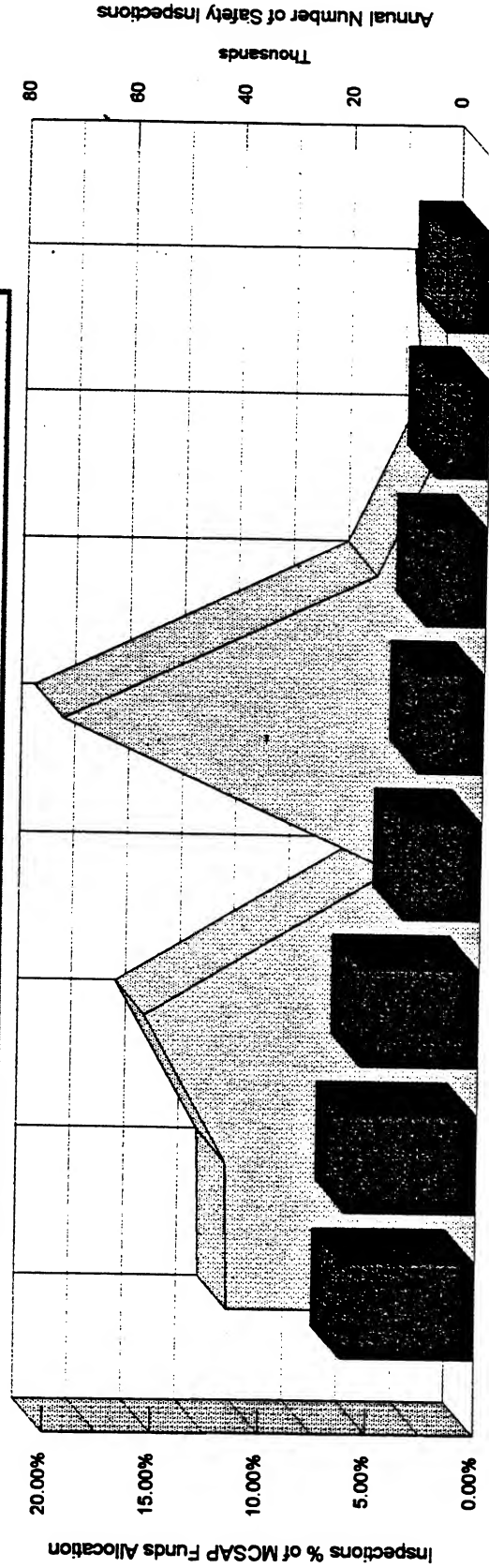
**Graph 2.**

**Comparative Study of Motor Carrier Services Programs  
Field Activity Measures - Weight & Length Violations**



**Graph 3.**

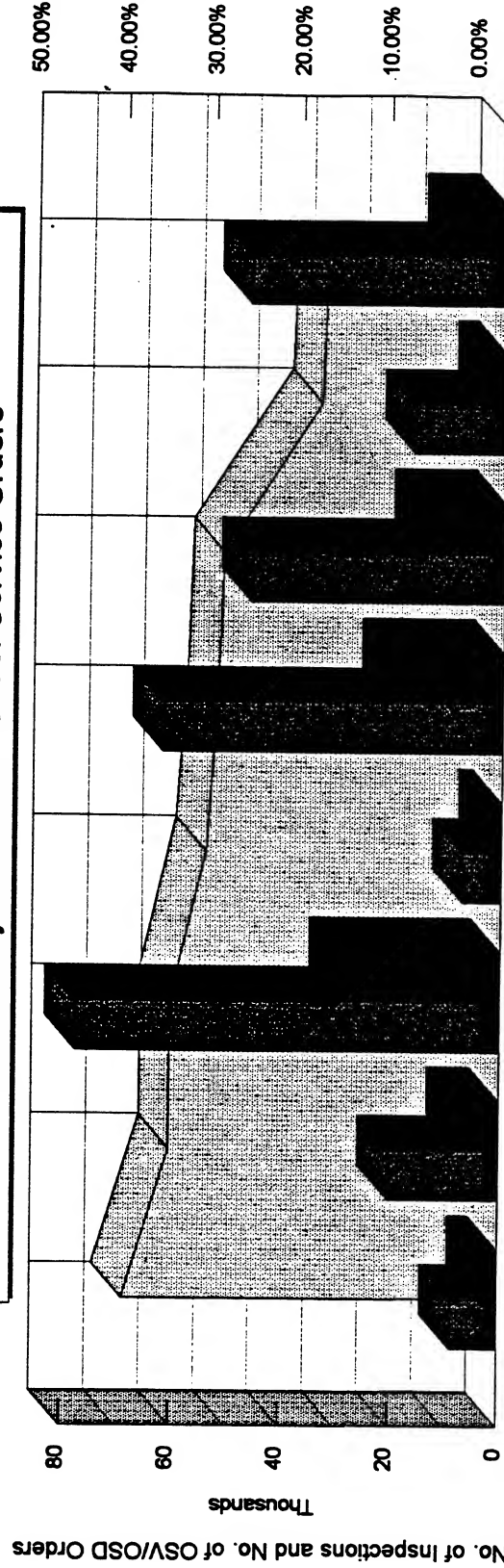
**Comparative Study of Motor Carrier Services Programs**  
Field Activity Measures - Safety Inspections



| Jurisdictions                     |  | Arizona   | Colorado  | Washington  | North Dakota | Texas       | Nebraska  | Wyoming   | Idaho     |
|-----------------------------------|--|-----------|-----------|-------------|--------------|-------------|-----------|-----------|-----------|
| Annual # Inspections              |  | 48,083    | 46,819    | 62,046      | 18,873       | 77,824      | 20,153    | 7,024     | 8,589     |
| MCSAP \$s                         |  | \$744,532 | \$766,918 | \$1,141,480 | \$467,841    | \$2,622,198 | \$733,353 | \$298,136 | \$426,268 |
| Inspections % MCSAP \$ Allocation |  | 8.19%     | 6.08%     | 5.44%       | 3.56%        | 2.86%       | 2.75%     | 2.36%     | 2.01%     |

**Graph 4.**

**Comparative Study of Motor Carrier Services Programs  
Field Activity Measures - Out of Service Orders**



| Jurisdictions           | Idaho  | Nebraska | Texas  | Wyoming | Washington | Arizona | North Dakota | Colorado |
|-------------------------|--------|----------|--------|---------|------------|---------|--------------|----------|
| ■ Annual # Inspections  | 8,569  | 20,153   | 77,644 | 7,024   | 62,046     | 46,083  | 16,673       | 46,619   |
| ■ #OSV/OSD Orders       | 3,686  | 7,611    | 29,313 | 2,372   | 20,213     | 14,744  | 3,503        | 9,535    |
| ■ OSV/OSD % Inspections | 43.02% | 37.77%   | 37.75% | 33.77%  | 32.58%     | 31.99%  | 21.01%       | 20.45%   |

### 4.3 Program Philosophy: Enforcement versus Regulatory

The following table displays findings that lead to a conclusion as to whether the motor carrier programs of each jurisdiction are conducted under an enforcement or regulatory philosophy, or whether the philosophy of the jurisdiction should be characterized as of both a regulatory and enforcement nature. Factors considered in reaching a finding on a program's philosophy and abbreviations used in the table are explained below:

|                      |  |
|----------------------|--|
| <b>Jn.</b>           | <i>Jurisdiction</i>  |
| <b>Program</b>       | Weight and Length ( <i>W&amp;L</i> ) Program OR <i>Safety</i> program  |
| <b>Sup Agency</b>    | <i>Superior Agency</i> to which program management reports   |
| <b>Employee Type</b> | <i>Highway or State Patrol Trooper</i> (fully sworn police officer) OR <i>Non-Trooper</i> (ranging from civilian to special officers with limited authority)   |
| <b>Cmd</b>           | Senior Level <i>Command</i> Structure: <i>Military (Mil)</i> OR <i>Civilian (Civ)</i>  |
| <b>Wpns</b>          | <i>Weapons</i> (Firearms) Carried by Program Officers? ( <i>Yes or No</i> ) (No other types of weapons such as pepper spray were found to be in use - see interview summaries for more detail.)  |
| <b>Arrest Auth</b>   | <i>Arrest Authority</i> possessed or utilized by program officers: <i>No</i> = No arrest authority in statute; <i>Ex</i> = Arrest authority possessed and exercised; <i>NEx</i> = Arrest authority possessed but not exercised   |
| <b>Acht</b>          | Do the <i>Achievement</i> measures examined in section 4.2 indicate a <i>Regulatory</i> or <i>Enforcement</i> philosophy based on: weight and length violations as a percent of checks and the relative ranking among the states in that category; and/or the number of safety inspections conducted as a percent of the MCSAP allocation, out-of-service orders as a percent of safety inspections, and the relative ranking among the states in each of those categories.  |
| <b>Atde</b>          | Does the <i>Attitude</i> of the agency as expressed and observed during the interview process represent a <i>Police (Pol)</i> or <i>Civilian (Civ)</i> style approach to program administration? It is important to note that employees of all jurisdictions are required to wear uniforms. Non-Trooper uniforms resemble the jurisdictions' Trooper or other police uniforms to varying degrees. The degree of similarity of uniforms and other practices are reflected in findings regarding the agencies' attitude. |
| <b>Philosophy</b>    | Do all the factors listed indicate a <i>Regulatory</i> or <i>Enforcement</i> philosophy or <i>Both</i> ? If a jurisdiction administers its motor carrier programs under two agencies, a characterization of philosophy is provided for each of the agencies. If the philosophies of a jurisdiction's two agencies differ (one <i>Regulatory</i> and one <i>Enforcement</i> ) then the characterization of the jurisdiction would be considered as "Both."  |

**Table 2. Program Philosophy: Enforcement versus Regulatory**

| Jn.      | <ul style="list-style-type: none"> <li>• Program</li> <li>• Sup. Agency</li> <li>• Employee Type</li> </ul>   | Arrest |           |           |          |            | Philosophy  |
|----------|---|--------|-----------|-----------|----------|------------|-------------|
|          |   | Cmd    | Wpns      | Auth      | Acht     | Atde       |             |
| Alberta  | <ul style="list-style-type: none"> <li>• W&amp;L and Safety</li> <li>• Min. of Trans. &amp; Util.</li> <li>• Non-Trooper</li> </ul>                                 | Civ    | No        | NEx       | --       | Civ        | Regulatory  |
| Arizona  | <ul style="list-style-type: none"> <li>• Fixed W&amp;L</li> <li>• Dept. of Trans.</li> <li>• Non-Trooper</li> </ul>   | Civ    | No        | No        | R        | Civ        | Regulatory  |
|          | <ul style="list-style-type: none"> <li>• Mobile W&amp;L &amp; Safety</li> <li>• Highway Patrol (DPS)</li> <li>• Non-Trooper &amp; Trooper</li> </ul>                | Mil    | Yes       | Ex        | E        | Pol        | Enforcement |
| Colorado | <ul style="list-style-type: none"> <li>• W&amp;L and Safety</li> <li>• Dept. of Rev.</li> <li>• Non-Trooper</li> </ul>  | Civ    | No        | No        | R        | Civ        | Regulatory  |
|          | <ul style="list-style-type: none"> <li>• Safety</li> <li>• State Patrol (DPS)</li> <li>• Trooper</li> </ul>   | Mil    | Yes       | Ex        | R        | ?          | Enforcement |
| Idaho    | <ul style="list-style-type: none"> <li>• W&amp;L</li> <li>• Dept. of Trans.</li> <li>• Non-Trooper</li> </ul>   | Civ    | No        | No        | R        | Civ        | Regulatory  |
|          | <ul style="list-style-type: none"> <li>• Safety</li> <li>• State Police (DLE)</li> <li>• Trooper</li> </ul>   | Mil    | Yes       | Ex        | E        | Pol        | Enforcement |
| Nebraska | <ul style="list-style-type: none"> <li>• W&amp;L and Safety</li> <li>• State Patrol</li> <li>• Non-Trooper</li> </ul>   | Mil    | Yes       | Ex        | E        | Pol        | Enforcement |
| N Dakota | <ul style="list-style-type: none"> <li>• W&amp;L and Safety</li> <li>• Highway Patrol</li> <li>• Non-Trooper - W&amp;L</li> <li>• Trooper - Safety</li> </ul>       | Mil    |           |           |          |            | Both        |
|          |   |        |           | No<br>Yes | No<br>Ex | R<br>R     | Civ<br>Pol  |
| Texas    | <ul style="list-style-type: none"> <li>• Highway Patrol (DPS)</li> <li>• W&amp;L and Safety</li> <li>• Trooper</li> </ul>   | Mil    | Yes       | Ex        | E        | Pol        | Enforcement |
| Wshngtn  | <ul style="list-style-type: none"> <li>• W&amp;L and Safety</li> <li>• State Patrol</li> <li>• Non-Trooper</li> </ul>   | Mil    | No        | NEx       | E        | Pol        | Enforcement |
| Wyoming  | <ul style="list-style-type: none"> <li>• W&amp;L and Safety</li> <li>• Highway Patrol (DOT)</li> <li>• Non-Trooper - W&amp;L</li> <li>• Trooper - Safety</li> </ul> | Mil    |           |           |          |            | Both        |
|          |   |        | No<br>Yes | No<br>Ex  | R<br>E   | Civ<br>Pol |             |

### Arizona, Colorado, and Idaho

Three states, Arizona, Colorado and Idaho, divide program responsibilities between two separate agencies. (In Arizona, the Highway Patrol utilizes non-Trooper "Special Officers," in combination with regular Troopers for its mobile weight and length and its safety inspection responsibilities, while the state's Department of Transportation administers fixed location weight and length inspections.) For those states, findings regarding program philosophy generally follow the division of responsibilities. The motor carrier safety programs vested in Highway or State Patrol organizations are uniformly characterized as "Enforcement" in nature; they all employ weapon carrying officers, exercise arrest powers, report through a military-style chain of command, and exhibit a police-style attitude. Note that the level of achievement for North Dakota and Colorado do not indicate aggressive enforcement in regard to out-of-service orders, but the overall analysis of other indicators produces the "Enforcement" characterization. While Arizona's out-of-service ranking is relatively low among the study jurisdictions, the Patrol still has an out-of-service order per inspection rate of greater than 30 percent.

The weight and length programs (and partial responsibility for the safety program in the case of Colorado) are vested in non-Highway or State Patrol agencies. These organizations are all characterized as "Regulatory" in nature. None of these jurisdictions employ weapons carrying employees, none exercise arrest powers. They report through a civilian-style chain of command, and exhibit, with the exception of the wearing of uniforms, a civilian-style attitude to program administration. No jurisdiction, except Texas, shows a significant rate of violations per weight and length check.

### Nebraska, North Dakota, Washington, and Wyoming

Four states administer their motor carrier programs responsibilities under Highway or State Patrols utilizing either a combination of Trooper and non-Trooper personnel, or exclusively non-Trooper personnel.

The Nebraska State Patrol utilizes non-Trooper Commercial Enforcement Officers (CEO's) for all motor carrier program functions. These officers carry firearms and operate in an organization that is very similar to the "regular" patrol. Nebraska is characterized as "Enforcement" in nature. (Nebraska's conversion to weapons carrying status occurred in July of 1994. The conversion involved a variety of personnel actions including psychological testing, additional training, and proficiency testing. The total cost of the conversion is estimated at \$100,000. Additionally the CEO's have undergone a review of pay and benefits and are expected to realize upgrades moving them closer to regular Patrol Troopers early in 1995.)

The Washington State Patrol conducts weight and length and safety inspection programs through employment of uniformed Commercial Vehicle Officers (CVO's) who occupy the status of "Special Deputies." While not carrying firearms and not as similar to the State Patrol as are CVO's in Nebraska, the Washington program operates and obtains levels of achievement in a manner that produces an "Enforcement" characterization.

The North Dakota Highway Patrol utilizes Troopers in its Motor Carrier Safety unit to carry out commercial vehicle safety inspection and enforcement activities which are conducted under an "Enforcement" philosophy. The Patrol employs uniformed civilian staff to conduct weight and length inspection responsibilities which are



conducted under a "Regulatory" philosophy. The overall motor carrier program philosophy in North Dakota is characterized as "Both" regulatory and enforcement in nature.

Wyoming, like North Dakota, utilizes Troopers in its Motor Carrier Safety unit to carry out commercial vehicle safety inspections and enforcement and its Patrol employs uniformed civilian staff to conduct weight and length inspection responsibilities. The motor carrier program philosophy in Wyoming is characterized as "Both" regulatory and enforcement in nature.

### Alberta and Texas

Alberta conducts motor carrier safety and weight and length program functions utilizing uniformed civilian personnel under the Carrier Services Program of the Ministry of Transportation and Utilities. Alberta's program staff do not carry weapons, do not exercise arrest powers, report through a civilian-style chain of command, wear relatively understated uniforms, and it is the expressed policy of the agency to act in a regulatory fashion.

Texas is the only one of the study jurisdictions that conducts both weight and length and safety programs through the utilization of police personnel, essentially the Texas highway patrol, employed by the Department of Public Safety. Every facet of the organization's philosophy is of an "Enforcement" nature. Program achievement data shows that the agency's attention is on enforcement; Texas shows the least number of vehicles checked for weight and length among the study jurisdictions but the greatest percent of checks resulting in violations. Also, Texas shows the largest number of safety inspections and the third largest level of out-of-service orders as a percent of inspections.

## 4.4 Personnel Practices

Personnel practices in the study jurisdictions, and other personnel-related information, were analyzed in the form of employee turnover percentages, salary comparisons, hiring and training requirements, and motor carrier officers' impressions of their professional standing versus law enforcement officers.

### Employee Turnover

Graph 5. following page II-12 depicts employee turnover percentages as reported by motor carrier management in each of the jurisdictions. The graph shows, by the *dark blue bars*, the annual percentage of the individuals employed by the agency that are replaced with other individuals. Also displayed, *in the light blue background area*, is the average turnover rate of 5.4% for all of the study jurisdictions. Information supplied by study jurisdictions indicate that North Dakota has the lowest annual turnover percentage (1%), and that Nebraska has the highest (11%).

The measure can be indicative of overall employee morale or satisfaction. However, because the percentages were expressed as general empirical estimations by management (or estimations by the project team based on non-empirical statements by management), usually without the benefit of research, use of the measure should be limited. Also, factors other than morale, such as conditions in the local economy

(good conditions leading to flight to better paying jobs, poorer conditions leading to greater longevity) and remoteness of employee assignments, particularly in the case of fixed weight and length check stations, were cited by program managers and staff as significant contributors to turnover.

### Salary Comparisons

Graph 6. demonstrates the mid-range salaries of Fixed and Mobile programs as a percent of Highway Patrol Trooper mid-range salaries. If a jurisdiction's Mobile program is carried out by Highway Patrol Troopers (HPT) and some other element (DOR, DOT, or HPO), percent figures represent the other element as a percent of HPT. (Salary levels are assumed to include benefits in all cases.)

The *light blue background area* denotes the salaries of Highway Patrol Troopers in each of the study jurisdictions. The *dark blue bar* denotes the salaries of Fixed Weight and Length officer salaries. The *red bar* denotes the salaries of Mobile Weight and Length and Safety program officers. Data presented below the table shows figures included in the graph plus additional information on the percent of Fixed and Mobile officer salaries versus Highway Patrol Trooper Salaries.

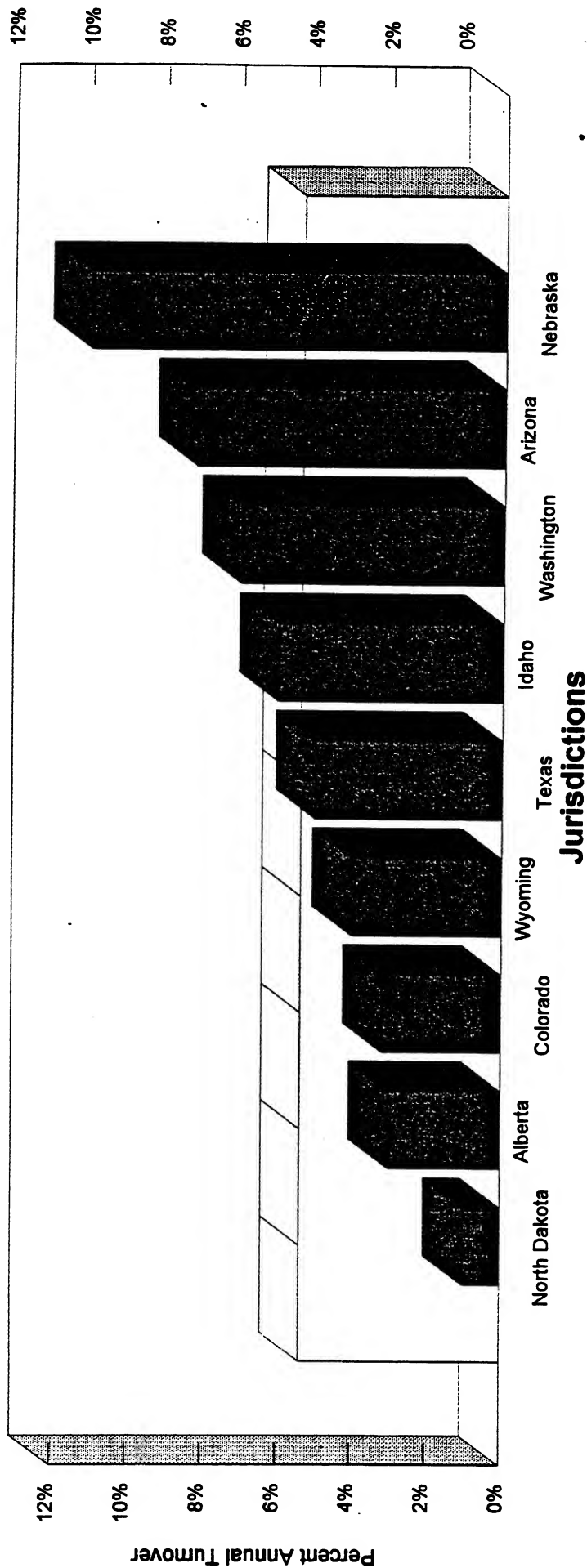
The data shows that Washington's Commercial Vehicle Enforcement officers earn salaries that are the highest percentage of Highway Patrol Trooper Salaries of non-HPT agencies at over 90% for both Fixed and Mobile officers. North Dakota's Fixed program officers have the lowest percentage at just under 70%.

Note that all jurisdictions in which HPT are responsible for the Mobile program (designated by a "T" on the red bar) show that salaries are 100% of HPT. Alberta has no information on Highway Patrol Trooper salaries (there is no Highway Patrol in Alberta - the Royal Canadian Mounted Police, a federal agency, would be the most representative general highway law enforcement agency in Alberta.)

**Graph 5.**

**Comparative Study of Motor Carrier Services Programs**

Annual Employee Turnover

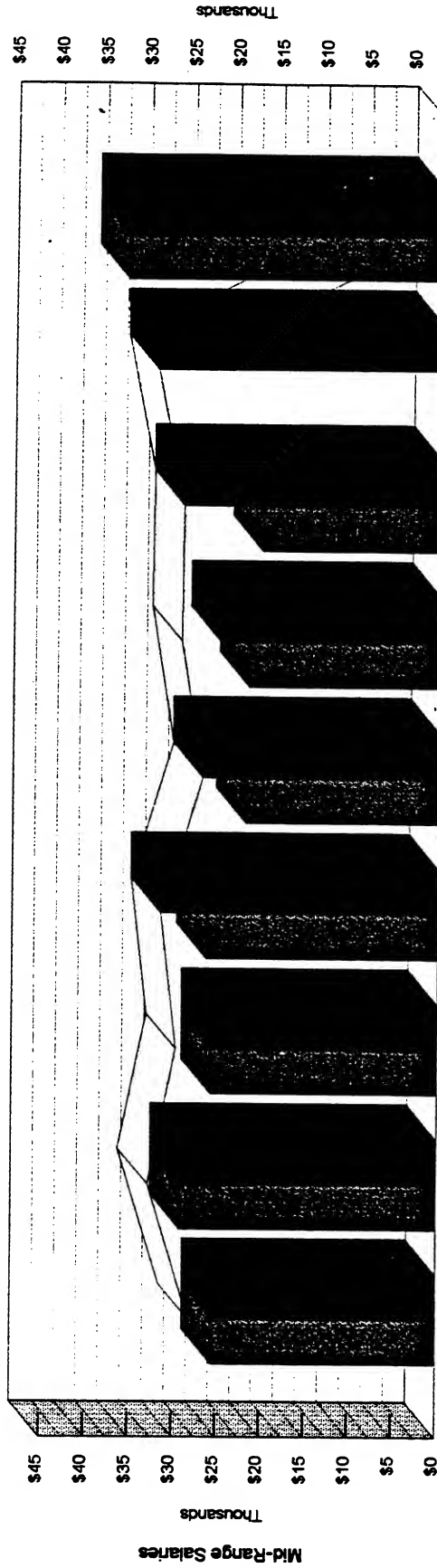


■ Turnover Rate  
□ Average of Study Jurisdictions

# Graph 6.

## Comparative Study of Motor Carrier Services Programs

Salaries Compared to Highway Patrol Troopers



| Jurisdiction             | Washington | Colorado | Nebraska | Idaho   | Wyoming | Arizona | North Dakota | Texas   | Alberta |
|--------------------------|------------|----------|----------|---------|---------|---------|--------------|---------|---------|
| ■ Fixed MCS              | 25,500     | 29,214   | 25,787   | 28,376  | 21,848  | 21,674  | 20,316       | N/A     | 35,724  |
| ■ Mobile MCS             | 25,500     | 29,214   | 25,787   | 31,575  | 26,906  | 24,975  | 28,280       | 32,304  | 35,724  |
| □ HP Trooper             | 28,232     | 32,916   | 29,786   | 31,575  | 26,906  | 29,382  | 28,280       | 32,304  | N/A     |
| □ Fixed % of HP Trooper  | 90.32%     | 88.75%   | 86.55%   | 83.53%  | 81.57%  | 73.77%  | 89.39%       | 0.00%   | N/A     |
| □ Mobile % of HP Trooper | 90.32%     | 88.75%   | 86.55%   | 100.00% | 100.00% | 85.00%  | 100.00%      | 100.00% | N/A     |

### Hiring and Training Requirements and Perceptions of Professional Status

Portrayed in Table 3. are the minimum educational hiring requirements for each of the organizations which were a subject of detailed study, the post-hire training requirements for each of those organizations, and the impressions of non-Highway Patrol Troopers employed by certain of the jurisdictions in regard to the perspective that law enforcement officers, managers, or other important parties hold regarding the professional status of those employees. Also displayed are the program philosophies for each of the agencies involved and a measurement of "Separate Entity Relations." This latter item is a reflection of the manner in which the non-Highway Patrol employees or agency interact, cooperate, and generally get along with the Highway or State Patrol agencies that carry on complementary or shared responsibilities.

#### **Keys to Table Interpretation:**

It is important to keep in mind that all but one jurisdiction (Texas), employs non-Trooper personnel for some facet of motor carrier program administration. In order to appropriately identify hiring and training requirements, and the impressions of such employees, they are identified as Highway Patrol "Other" (HPO) in the table. Other keys to interpreting the table are listed below:

#### **Organizations:**

- DOR = Dept. of Revenue
- DOT = Dept. of Transportation
- HPO = Highway Patrol Non-Trooper
- HPT = Highway Patrol Trooper)

#### **Employee Hiring Requirements:**

- HS = High School
- PSH = Post High School
- LE = Law Enforcement Experience
- MI = Military Experience

#### **Training Requirements:**

- LEA = Law Enforcement Academy: Can be full law enforcement training or a specialty academy course abbreviated for a specific employee group;
- OF = Other Formal: Can be formal training related to motor carrier services duties conducted by the jurisdiction, or sponsored by the jurisdiction and conducted by an outside party;
- MCSAP: The federally financed Motor Carrier Assistance Program safety inspection course;
- OJT = On-the-Job Training: Training done while the employee is on duty and is conducted or supervised by management or by senior employees.

**Professional Status vs Law Enforcement (Employee Impression):**

This measurement applies to employees of non-Highway or State Patrol agencies or non-Trooper employees of Highway or State Patrol agencies, and their impression of their professional standing in relation to Highway or State Patrol Troopers and other fully-sworn law enforcement officers,

- "Neg" indicates that the employees believe that they are considered or treated negatively in regard to the importance or respectability of their jobs versus the manner in which law enforcement positions, particularly highway patrol trooper positions are considered or treated;
- "Acc" indicates that the employees believe that their professional status is appropriately accepted; not necessarily that they are considered "equal" to law enforcement but that there is appropriate recognition of the importance or respectability of the positions and their responsibility;
- "Pos" indicates that the conditions for "Acc" are present and that there is something positive about employment conditions or practices that gives the positions more credit for importance or respectability than normal.

**Separate Entity Relations:**

Relations between the agency subject to the study and its counterpart are displayed. For example, the Department of Revenue (DOR) is the subject agency in Colorado and Highway Patrol Troopers (HPT) are its counterpart; in Washington, the Highway Patrol's Commercial Vehicle Enforcement Section (HPO) is the subject agency (HPO) and the Highway Patrol Troopers (HPT) are its counterpart. Conclusions were based on interviews with agency staff and any evidence of positive or negative feelings based on those discussions or other factors encountered during the study. The measure is expressed as "-", "0", or "+".

- "-" indicates an overall feeling of negativity;
- "0" indicates a general acceptance of split responsibilities, roles, and status;
- "+" indicates that conditions deserving a "0" exist and that there is some extraordinary facet of the relationship that gives evidence of positive feelings.
- "?" indicates that interviews were not conducted or information is otherwise unavailable on which to base a conclusion

**Table 3. Professional Status vs Law Enforcement,  
Separate Entity Relations, and  
Hiring and Training Requirements**

| Jn. | Org. | Employee Impression<br>Prog S.E. of Pro. Status<br>Phil. Rels. vs Law Enf. |    |                 | Hiring Req's      | Training Req's   |
|-----|------|--|----|-----------------|-------------------|------------------|
|     |      |  |    |                 |                   |                  |
| ALB | DOT  | R  | NA | Acc             | HS, PHS or MI     | OF, OJT          |
| ARI | DOT  | R  | 0  | Acc             | HS                | OF, OJT,         |
|     | HPO  | E  | -  | Neg             | HS                | LEA,OF,MCSAP,OJT |
|     | HPT  | E  | ?  | ----            | HS                | LEA,OF,MCSAP,OJT |
| COL | DOR  | R  | 0  | Fixed-Acc       | HS                | MCSAP, OJT       |
|     | HPT  | E  | ?  | Mob-Neg<br>---- | HS                | LEA,OF,MCSAP,OJT |
| IDA | DOT  | R  | -  | Neg             | NONE              | OJT              |
|     | HPT  | E  | -  | ----            | HS                | LEA,OF,MCSAP,OJT |
| NEB | HPO  | E  | +  | Pos             | HS                | LEA,OF,MCSAP,OJT |
|     | HPT  | E  | ?  | ----            | HS                | LEA,OF,OJT       |
| ND  | HPO  | R  | 0  | Acc             | HS                | OF, OJT          |
|     | HPT  | E  | 0  | ----            | HS, PHS           | LEA,OF,MCSAP,OJT |
| TEX | HPT  | E  | NA | ----            | HS, PHS, LE or MI | LEA,OF,MCSAP,OJT |
| WA  | HPO  | E  | +  | Pos             | HS                | LEA,OF,MCSAP,OJT |
|     | HPT  | E  | ?  | ----            | HS                | LEA,OF,OJT       |
| WY  | HPO  | R  | +  | Acc             | HS                | LEA, OJT         |
|     | HPT  | E  | +  | ----            | HS                | LEA, MCSAP, OJT  |

Findings regarding employees' impressions of their professional status in relation to law enforcement officers were tracked against findings in other topics examined in the table to produce the following patterns:

- Of the eight organizations employing non-Highway or State Patrol Troopers, six are described as operating under a Regulatory philosophy (Alberta, Arizona, Colorado, Idaho, North Dakota, and Wyoming), and two are described as operating under an Enforcement philosophy (Nebraska and Washington).
- Of the six Regulatory-style organizations, five employee groups exhibit Acceptance of their professional status versus law enforcement personnel, and two exhibit Negative feelings regarding their status. None exhibit feelings characterized as Positive by the definition employed for the study. (Colorado's program has two employee groups under its Department of Revenue Ports-of-Entry Division which are divided between fixed station and mobile assignments. *It is the only organization employing non-Highway or State Patrol Troopers that does not rotate its employees between fixed and mobile assignments.*)

- Of the two Enforcement-style non-HPT organizations, both exhibit Positive feelings regarding their professional status versus law enforcement personnel.
- For both cases in which Negative feelings regarding professional status were exhibited, they were accompanied by Negative (-) Separate Entity Relations.
- For both cases in which Positive feelings regarding professional status were exhibited, they were accompanied by Positive (+) Separate Entity Relations and high levels of post-hire training requirements for non-Highway or State Patrol Trooper personnel.

## **4.5 Other Findings**

Following is a description of study findings related to topics not covered in previous sections:

### **Compliance with Federal Highway Administration Requirements**

In order to receive MCSAP assistance from the Federal Highway Administration, states are required to adopt certain federally mandated commercial vehicle regulations and to show evidence of their enforcement of those regulations through filing an annual Standard Enforcement Plan (SEP) and an annual report of activities and accomplishments under the plan. All states which were subjects of this study are considered to be in compliance with FHWA requirements. Nebraska only achieved that status within the last twenty-four months by adopting all of the necessary federal regulations.

### **Organizational Changes**

Four jurisdictions have undergone organizational changes within the least ten years significant enough to warrant discussion as part of the study. Those changes are discussed below:

#### **Nebraska:**

In July, 1994, a change in policy was implemented which provides for firearms to be carried by Commercial Enforcement Officers working in both fixed and mobile capacities. In order to qualify to carry firearms, and to exercise the authority coincident with firearms, each Officer had to pass psychological and weapons testing. As of the end of July, 1994, six officers had not yet qualified. Because of a pre-agreement that no officer would lose employment or pay as a result of the changed policy, any officer who does not meet testing requirements may remain in his/her position without use of a firearm. A salary and retirement system study has been completed by the state personnel agency which is expected, early in 1995, to result in an increase in benefits for Commercial Enforcement Officers to the level of State Patrol Troopers. Employees that have not met testing requirements will not receive the increases.



**Alberta:**

The provincial highway patrol (which dealt mainly with commercial vehicles) was eliminated in 1987 and employees were transferred to the Carrier Services program. Police aspects of training programs were exchanged for more service-oriented training. At the time this study was conducted, fewer than fifteen of the Highway Patrol employees remain in the Carrier Services program. It was reported that at the time of the transfer, and to a certain extent lingering feelings exist, that the change constituted a demotion in status of the affected employees. The fact of an elected Minister of Transportation and Utilities in the parliamentary system adds pressure to keep the program's focus as a regulatory (as opposed to enforcement) style agency. Good relations with the trucking industry are emphasized.

**Wyoming:**

The Port-of-Entry organization was transferred from the Department of Revenue to the Highway Patrol in 1990. The change resulted in a shift in program emphasis from revenue collection to safety inspections. No employees, including supervisors, suffered decreased compensation as a result of the change, but all Port-of-Entry supervisors now report up to a command authority headed by ranked Patrol Officers. In general, the change is well-accepted and considered to be favorable to the organization because of improved coordination among program functions.

**Arizona:**

In 1984, mobile weight and length and safety officers employed by the Arizona Department of Transportation were transferred to the Highway Patrol in the Department of Public Safety. This was a major organizational event for the programs. Of the 21 mobile officers employed by DOT, 16 made the transfer and 5 did not, either because of failure to pass law enforcement exam criteria or because they did not want to transfer. Transferred officers did not become regular troopers but were classed as "special officers" with pay and retirement benefits below those of regular troopers. It is expected that the special officer class will be phased out through attrition with regular troopers assuming all relevant responsibilities over time.

**General Impressions**

The study process was designed to focus on information collection and analysis in relation to nine jurisdictions. To that end, the study team was appropriately directed away from gaining a detailed understanding of Montana's motor carrier programs so that no bias would be inherent in the evaluation and data gathering process. Conclusions regarding the study's relation to Montana are left to interested parties and decision-makers familiar with Montana programs.

While not based on a detailed understanding of Montana's programs, there was one very basic impression gained by the study team that it believes is relevant to motor carrier programs in general and therefor to Montana's situation. This basic impression is that the issues of operating by a "Regulatory" versus "Enforcement" style philosophy, and the impact of program philosophy on personnel practices, are pervasive among the study jurisdictions. Each of them has wrestled with those issues in the past and continue to do so through the present.

Motor carrier program officers, especially those engaged in mobile programs in which they have the responsibility and opportunity to pursue, inspect, and issue citations or other statements of violation to the trucking public are placed in a position that resembles a police officer. Also, officers assigned to fixed stations typically have the authority to cite vehicles or drivers because of irregularities or improprieties in permits, licenses, or cargo that can result in some type of penalty for the driver or his or her employer. These activities also give rise to the appearance of police-like responsibilities. It is in recognition of this appearance and the need to display employees' authority that every jurisdiction requires its motor carrier program employees to wear policy-style uniforms.

Some of the issues that are the focus of the ongoing debate are: a) the degree of danger represented by violators of motor carrier laws, the immediacy of the need to deal with violators, and whether the need to deal with such violators is as great as it is for the type of offender which police personnel are charged to apprehend; b) whether motor carrier program personnel should undertake the risks and responsibilities of the type associated with general law enforcement officers; c) the type of organization (police or civilian) through which motor carrier programs should be administered; and d) the status that should be assigned to program personnel.

In the nine study jurisdictions examined, there are six variations on combinations of organization types and personnel status designed to answer the questions:

- Alberta uses *one civilian organization* with *all civilian* employees to conduct both safety and weight and length programs;
- Arizona and Idaho use *two agencies*, *one police organization* with *police employees* to conduct the safety program, and *one civilian organization* with *civilian employees* to conduct the weight and length program;
- Colorado uses *two agencies*, *one police organization* with *police employees* to conduct the safety program, and *one civilian organization* with *civilian employees* to conduct both safety and weight and length programs;
- Nebraska and Washington use *one police organization* with *civilian or quasi-police employees* to conduct both safety and weight and length programs;
- North Dakota and Wyoming use *one police organization* with *police employees* to conduct safety programs and *civilian employees* to conduct weight and length programs; and
- Texas uses *one police organization* and *police employees* to conduct both safety and weight and length programs.

While each of the study jurisdictions reported being basically satisfied with its organization and the manner in which it has addressed the issues, it is obvious that there is not a uniform set of practices that represents a consensus among them. In other words, no one seems to have all the answers.

It is the opinion of the study team that the best answers may be best found through the development of standards that serve to establish an identity for motor carrier program personnel that sets them apart from other types of regulatory and enforcement officers. Motor carrier program responsibilities and the increasingly

complex knowledge base associated with commercial vehicle safety, hazardous materials transportation, and other concerns, should be sufficient as a basis for routinized training, field practices, job descriptions, and other personnel practices. Identification with such professional standards may allow motor carrier program personnel to identify their occupation as unique to itself and at least partially de-emphasize the desire to associate their activities with other, inherently dissimilar occupation types. Whether the best avenue for creation of such standards and occupational identity is through the FHWA, the Commercial Vehicle Safety Alliance, a professional association, or through other means, is a topic for further discussion.